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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,403	02/21/2007	Karl-Heinz Minuth	095309.57633US	1402
23911 7590 01/08/2008 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER ALEX, JAMES S	
			ART UNIT 4155	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/577,403

**Applicant(s)**

MINUTH ET AL.

**Examiner**

JAMES ALEX

**Art Unit**

4155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date 4/27/06 & 2/21/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

### **DETAILED ACTION**

The title of the invention is not sufficiently descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Ventilated Motor Vehicle Seat.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. US 6062641, herein referred to as Suzuki, in view of Gregory et al. US 5597200, herein referred to as Gregory.

Re claim 10, Suzuki disclose a series of components 10 for a motor vehicle seat comprising;

A cushion core 20,

Ventilation ducts 24 running along and inside at least one of a seat surface and a backrest surface (see Fig. 4 for grooves in the backrest and the seat),

Ventilation channels 23 arranged essentially transversely to the ducts and penetrating the entire thickness of the cushion core and extending from the ventilation ducts as far as a rear wall facing away from at least one of the seat surface and backrest surface (Col 2, lines 37-39), and,

wherein a predetermined arrangement of at least one of the ventilation ducts and channels in the cushion core defines regions ventilated to different extents depending on an occupant (Column 3, lines 51-54).

Suzuki does not disclose that the ventilation ducts and channels have constant cross sections.

Gregory teaches the use of ventilation channels 121 and ducts 114 (see Fig. 3) in a seat cushion that appear to have constant cross sections for at least a portion of the lengths to facilitate uniform airflow and pressure throughout the channels and ducts. Since Gregory doesn't say that the channels and ducts do not have constant cross sections, it is assumed that they do since it appears so from the drawings.

It would have been obvious to one of ordinary skill at the time the invention was made to modify the seat cushion disclosed by Suzuki by designing the ventilation channels and ducts to have a constant cross section similar to the ones taught by Gregory because a uniform cross section would allow for a constant volumetric flow rate of air with the inlet and outlet velocities being equal, so that there is an equal pressure

distribution throughout the channels and ducts which prevents lopsided wearing, and results in improved functionality.

Re claim 11, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 10. Suzuki further disclose that the ventilation requirement is adapted to a body pressure distribution (see Fig. 3; Col 3, lines 56-62).

Re claim 12, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 10. Suzuki further disclose that the ventilation requirement is adapted to body contact points (Col 4, lines 43-46).

Re claims 13 and 16, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 10 [claim 13]. Gregory further teaches ventilation ducts that are configured as a duct grid and intersect in a manner connected in flow terms (Col 7, lines 32-44; Gregory teaches two plural sets of ducts which intersect each other perpendicularly via overlapping common manifold areas, which meets the broad limitation of a duct grid) [claim 13] as well as ventilation channels which are arranged regularly (Col 7, lines 44-46; Gregory teaches a common manifold area (reads on applicant's limitation of a channel) occurring at each intersection of a first channel and second channel (these channels read on applicant's limitation of duct), which meets the broad limitation of regularly arranged channels)

[claim 16], so that the temperature change can be more evenly distributed throughout the seat surface. It would have been obvious to one of ordinary skill at the time the invention was made to modify the series of components disclosed by Suzuki by using a duct grid pattern and regularly arranged channels similar to the ones taught by Gregory because doing so would evenly distribute the cooling or heating fluid to the seat surface, so as to eliminate relative hot or cold spots, thereby increasing the user's comfort.

Re claim 14, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 13. Suzuki further disclose that the ventilation requirement is adapted to a body pressure distribution (see Fig. 3; Col 3, lines 56-62).

Re claim 15, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 14. Suzuki further disclose that the ventilation requirement is also adapted to body contact points (Col 4, lines 43-46).

Re claim 17, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 13. Suzuki further discloses that at least one of the ventilation ducts and channels are arranged only in regions with ventilation provided (Col 4, lines 11-18).

Re claim 18, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 13. Suzuki further discloses that at least one of the ventilation ducts and channels are closed in regions in which no ventilation is provided (Col 4, lines 11-18).

Re claim 19, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 18. Suzuki further discloses that at least one of the ventilation ducts and channels are closed in regions in which no ventilation is provided (Col 4, lines 11-18).

Re claim 21, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 13. Suzuki further discloses that the vehicle seat is actively ventilated (Col 3, lines 20-24), with at least one fan 34 operatively associated therewith.

Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. US 6062641 and Gregory et al. US 5597200 as applied to claim 13 above, further in view of Steinmeier US 6546578.

Re claim 21, Suzuki modified with a teaching of Gregory disclose the series of components as previously described in claim 13.

Suzuki does not disclose that the vehicle seat is a passively ventilated vehicle seat. Steinmeier teaches the use of a ventilated vehicle seat that is passively ventilated (Col 2, lines 13-21) for good climate comfort as well as being more economical and simple than ventilated seats with active means. It would have been obvious to one of ordinary skill at the time the invention was made to modify the series of components disclosed by Suzuki by using passive ventilation similar to the system taught by Steinmeier to save energy, thus reducing cost of use and manufacture.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 20070257541, US 20070001507, US 20070001506, US 7114771, US 6976734, US 6189966, US 5211697, US 5645314, US 3955224, US 3924893, US 20070120401, US RE39394, US 5902014, US 5524439, US 4893873, US 5927817.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES ALEX whose telephone number is (571)270-3740. The examiner can normally be reached on M-TH, 7:30 am to 5:00 pm; F, 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571) 272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor Batson/

Victor Batson  
Supervisory Patent Examiner  
Art Unit 4155

JSA 12/20/2007